


<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/818,600	SATO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tung S Lau	2863	

-- **The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**  
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3-31-2004.
2. ☒ The allowed claim(s) is/are 1-6,8,9,14,15,17,21,23 and 25-29.
3. ☒ The drawings filed on 29 October 2002 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☒ None   of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

## **DETAILED ACTION**

### **Prior art cited**

1. U.S. Patent 6525699 talk about a three-dimensional representation method for generating a three-dimensional image by displaying two-dimensional images on a plurality of image planes located at different depth positions wherein two-dimensional images are generated in which an object to be presented is projected, along the line of sight of an observer, onto the plurality of image planes located at different depth positions as seen from the observer, the brightness levels of the generated two-dimensional images are changed individually for each image plane and the generated two-dimensional images are displayed on the plurality of image planes.

### ***Allowable Subject Matter***

2. Claims 1-6, 8-9, 14-15, 17, 21, 23, 25-29 are allowed.

### ***Reasons for Allowance***

3. The following is an examiner's statement of reasons for allowance:

Independent claims 1, 21, and 28 contain allowable subject matter. None of the prior art of record shows or fairly suggests the claimed invention.

Regarding claim 1:

Art Unit: 2863

The primary reason for the allowance of claim 1 is the inclusion of an information processing apparatus that derives the calibration information needed to measure the position and/or orientation of a measuring object based on the output values of a position and/or orientation sensor including an input unit adapted to input a user's instruction indicating that a position and/or orientation, which changes according to movement of a mixed reality display device, of the indices on the real image input by said real image input unit and has been matched with a position and/or orientation of the indices on the virtual image generated by said virtual image generation unit. It is these features found in the claim, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes this claim allowable over the prior art.

Claims 2-6, 8, 9, 14, 15, 17, 27 are allowed due to their dependency on claim 1.

Regarding claim 21:

The primary reason for the allowance of claim 21 is an information processing method that derives the calibration information needed to measure the position and/or orientation of a measuring object based on the output values of a position and/or orientation sensor including the step of inputting position and/or orientation information from the sensor when a position and/or orientation of the indices included in the real image matches a position and/or orientation of a virtual image of the indices. It is these features found in the claim, as they are

Art Unit: 2863

claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes this claim allowable over the prior art.

Claims 23, 25, 26 are allowed due to their dependency on claim 21.

Regarding claim 28:

The primary reason for the allowance of claim 28 is an information processing method that derives the calibration information needed to measure the position and/or orientation of a measuring object based on the output values of a position and/or orientation sensor, which measures the position and/or orientation of the measuring object including an input step of inputting a user's instruction indicating that indices in a real space and the images generated in the generation step are matched on the display screen; an acquisition step of acquiring the output values from the position and/or orientation sensor according to the input in said input step.

Claim 29 is allowed due to their dependency on claim 28.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2863

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 571-272-2274.

The examiner can normally be reached on M-F 9-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5841 for Official RightFAX, for regular communications and 703-308-5841 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2815. TC2800 FAX

Telephone Numbers: 703-872-9306

TC2800 Customer Service FAX - (703) 872-9317

TL

  
John Barlow  
Supervisory Patent Examiner  
Technology Center 2800